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Indiana Public Retirement System

Executive Summary

Actuarial Valuations as of
June 30, 2011



EXECUTIVE SUMMARY

SUMMARY OF VALUATION RESULTS

	<u>State</u>	<u>PERF PSDs</u>	<u>Total</u>	<u>1977 Fund</u>
Valuation Summary:				
Actuarial Accrued Liability (AAL)				
ASA Account Balance			\$ 2,805,023,137	\$ 679,848,776
ASA Annuities - Retiree/Beneficiary/Disabled			801,369,029	
Pension - Retiree/Beneficiary/Disabled			4,569,417,231	970,676,496
Pension - Active and Inactive	\$ 2,538,861,413	\$ 4,198,476,483	6,737,337,896	1,988,431,007
Total			\$ 14,913,147,293	\$ 3,638,956,279
Actuarial Value of Assets (AVA) ¹				
ASA Account Balance			\$ 2,805,023,137	\$ 679,848,776
ASA Annuities - Retiree/Beneficiary/Disabled			801,369,029	
Pension - Retiree/Beneficiary/Disabled			4,569,417,231	970,676,496
Pension - Active and Inactive	1,433,516,270	2,391,260,643	3,824,776,913	1,943,261,593
Total			\$ 12,000,586,310	\$ 3,593,786,865
Market Value of Assets (MVA)				
ASA Account Balance			\$ 2,805,023,137	\$ 679,848,776
ASA Annuities - Retiree/Beneficiary/Disabled			801,369,029	
Pension - Retiree/Beneficiary/Disabled			4,569,417,231	970,676,496
Pension - Active and Inactive	1,606,211,496	2,679,335,016	4,285,546,512	2,070,841,180
Total			\$ 12,461,355,909	\$ 3,721,366,452
Unfunded Actuarial Accrued Liability: (AAL) - (AVA)				
ASA Account Balance			\$ -	\$ -
ASA Annuities - Retiree/Beneficiary/Disabled			-	
Pension - Retiree/Beneficiary/Disabled			-	-
Pension - Active and Inactive	1,105,345,143	1,807,215,840	2,912,560,983	45,169,414
Total			\$ 2,912,560,983	\$ 45,169,414
Funded Percentage: (AVA) / (AAL)				
ASA Account Balance			100.0%	100.0%
ASA Annuities - Retiree/Beneficiary/Disabled			100.0%	
Pension - Retiree/Beneficiary/Disabled			100.0%	100.0%
Pension - Active and Inactive	56.5%	57.0%	56.8%	97.7%
Total			80.5%	98.8%

¹ AVA is based on four-year smoothing of gains and losses on the MVA, with a 20% corridor.

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SUMMARY OF VALUATION RESULTS

	<u>JRS</u>	<u>C&E Fund</u>	<u>PARF</u>	<u>LEDB Fund</u>
Valuation Summary:				
Actuarial Accrued Liability (AAL)				
ASA Account Balance	\$ 24,359,001	\$ 6,270,943	\$ 21,591,820	
ASA Annuities - Retiree/Beneficiary/Disabled				
Pension - Retiree/Beneficiary/Disabled	198,796,748	46,695,123	16,806,641	\$ 3,037,280
Pension - Active and Inactive	<u>177,117,795</u>	<u>48,567,782</u>	<u>14,853,913</u>	<u>1,583,555</u>
Total	\$ 400,273,544	\$ 101,533,848	\$ 53,252,374	\$ 4,620,835
Actuarial Value of Assets (AVA) ¹				
ASA Account Balance	\$ 24,359,001	\$ 6,270,943	\$ 21,591,820	
ASA Annuities - Retiree/Beneficiary/Disabled				
Pension - Retiree/Beneficiary/Disabled	198,796,748	46,695,123	4,059,642	\$ 3,037,280
Pension - Active and Inactive	<u>25,467,608</u>	<u>19,633,383</u>	<u>-</u>	<u>596,408</u>
Total	\$ 248,623,357	\$ 72,599,449	\$ 25,651,462	\$ 3,633,688
Market Value of Assets (MVA)				
ASA Account Balance	\$ 24,359,001	\$ 6,270,943	\$ 21,591,820	
ASA Annuities - Retiree/Beneficiary/Disabled				
Pension - Retiree/Beneficiary/Disabled	198,796,748	46,695,123	4,885,921	\$ 3,037,280
Pension - Active and Inactive	<u>33,830,004</u>	<u>22,339,674</u>	<u>-</u>	<u>607,552</u>
Total	\$ 256,985,753	\$ 75,305,740	\$ 26,477,741	\$ 3,644,832
Unfunded Actuarial Accrued Liability: (AAL) - (AVA)				
ASA Account Balance	\$ -	\$ -	\$ -	
ASA Annuities - Retiree/Beneficiary/Disabled				
Pension - Retiree/Beneficiary/Disabled	-	-	12,746,999	\$ -
Pension - Active and Inactive	<u>151,650,187</u>	<u>28,934,399</u>	<u>14,853,913</u>	<u>987,147</u>
Total	\$ 151,650,187	\$ 28,934,399	\$ 27,600,912	\$ 987,147
Funded Percentage: (AVA) / (AAL)				
ASA Account Balance	100.0%	100.0%	100.0%	
ASA Annuities - Retiree/Beneficiary/Disabled				
Pension - Retiree/Beneficiary/Disabled	100.0%	100.0%	24.2%	100.0%
Pension - Active and Inactive	<u>14.4%</u>	<u>40.4%</u>	<u>0.0%</u>	<u>37.7%</u>
Total	62.1%	71.5%	48.2%	78.6%

¹ AVA is based on four-year smoothing of gains and losses on the MVA, with a 20% corridor.

EXECUTIVE SUMMARY

SUMMARY OF VALUATION RESULTS

	<u>State</u>	<u>PERF PSDs</u>	<u>Total</u>	<u>1977 Fund</u>
<u>Employer Contributions:</u>				
Effective Date	7/1/2012	1/1/2013		1/1/2013
Current Payroll	\$ 1,641,685,770	\$ 3,177,087,910	\$ 4,818,773,680	\$ 687,342,353
Development of True Rate ¹				
Normal Cost (Beginning of Year)	\$ 73,614,164	\$ 179,392,537	\$ 253,006,701	\$ 123,438,234
Amortization of Unfunded Actuarial Accrued Liability	84,263,994	138,404,949	222,668,943	3,671,206
Provision for Expenses				
Employee Contributions				(40,582,006)
Total Contribution Amount	\$ 157,878,158	\$ 317,797,486	\$ 475,675,644	\$ 86,527,434
True Contribution Rate	9.6%	10.0%	9.9%	12.6%
Approved Funding Rate ¹				
Approved Contribution Rate ²	9.7%	9.7%	9.7%	19.7%
Estimated Contribution Amount ³	\$ 165,613,260	\$ 327,967,445	\$ 493,580,705	\$ 142,060,854
Employee Contribution Rate	3.0%	3.0%	3.0%	6.0% ⁴
<u>Assumptions:</u>				
Valuation Interest Rate	7.0%	7.0%	7.0%	7.0%
Salary Scale	3.25% - 4.5%	3.25% - 4.5%	3.25% - 4.5%	3.25%
Cost-of-Living Assumption	1.0%	1.0%	1.0%	2.25%

¹ The rates and contribution amounts shown were developed on a funding basis only and do not reflect accounting requirements.

² The Approved Contribution Rates shown are based on payroll as of June 30, 2011. The Approved Contribution Rate shown is the aggregate rate for Political Subdivisions.

³ Estimated Contribution Amounts for June 30, 2011 are based on projected payroll to the date contribution rates go into effect. The actual dollar amount of employer cost will depend on the actual payroll during fiscal year 2013 for the State, calendar year 2013 for the Political Subdivisions, and calendar year 2013 for the 1977 Fund.

⁴ Only members with less than 32 years of service contribute to the Fund.

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SUMMARY OF VALUATION RESULTS

Employer Contributions:	JRS	C&E Fund	PARF	LEDB Fund
Effective Date	7/1/2012	1/1/2013	7/1/2012	7/1/2012
Current Payroll	\$ 45,764,278	\$ 24,028,462	\$ 18,081,976	
Development of True Rate ¹				
Normal Cost (Beginning of Year)	\$ 15,281,754	\$ 3,377,658	\$ 1,381,736	\$ -
Amortization of Unfunded Actuarial Accrued Liability	11,873,696	2,260,987	2,148,558	90,550
Provision for Expenses				49,652 ²
Employee Contributions	(2,678,007)	(961,138)	(1,084,919)	
Total Contribution Amount	\$ 24,477,443	\$ 4,677,507	\$ 2,445,375	\$ 140,202 ⁴
True Contribution Rate	53.5%	19.5%	13.5%	
Approved Funding Rate ¹				
Approved Contribution Rate ³	53.5%	20.75%	13.5%	
Estimated Contribution Amount	\$ 25,456,541 ⁴	\$ 5,230,933 ⁵	\$ 2,542,470 ⁴	\$ 140,202
Employee Contribution Rate	6.0% ⁶	4.0%	6.0%	
Assumptions:				
Valuation Interest Rate	7.0%	7.0%	7.0%	7.0%
Salary Scale	4.0%	3.25%	4.0%	3.0%
Cost-of-Living Assumption	4.0%	1.0%	N/A	1.0%

¹ The rates and contribution amounts shown were developed on a funding basis only and do not reflect accounting requirements.

² Set equal to the administrative expenses incurred in the prior year.

³ The Approved Contribution Rates shown are based on payroll as of June 30, 2011.

⁴ Contribution amount is appropriated by the State. Estimated State Appropriations for June 30, 2011 are based on projected payroll for the applicable fiscal year.

⁵ Estimated Contribution Amounts for June 30, 2011 are based on projected payroll to the date contribution rates go into effect. The actual dollar amount of employer cost will depend on actual payroll during calendar year 2013.

⁶ Only members with less than 22 years of service contribute to the Fund.

EXECUTIVE SUMMARY

SUMMARY OF VALUATION RESULTS

	PERF ¹				
	State	PSDs	Total	1977 Fund	
Membership Statistics:					
Active					
Number	45,912	102,021	147,933	13,376	
Average Age			47.6	41.1	
Average Years of Service			11.4	13.6	
Covered Payroll of Actives	\$ 1,641,685,770	\$ 3,177,087,910	\$ 4,818,773,680	\$ 687,342,353 ²	
Inactive - Vested					
Number			20,933	126	
Average Age			52.7	50.2	
Average Years of Service			11.8	22.8	
Inactive - Non-Vested					
Number			71,806	791	
Retiree/Beneficiary/Disabled					
Number			70,380	2,966	
Average Age			72.5	61.5	
Annual Benefits Payable ³			\$ 539,747,100	\$ 68,178,739	
Total Membership			311,052	17,259	

¹ Head counts reflect the record counts used in the valuation, which may include duplicate records for members (e.g. member may be a retiree and a beneficiary).

² For the 1977 Fund, payroll is the applicable first class officer pay for each member.

³ For PERF, the Annual Benefits Payable includes \$445,230,274 of employer funded annuities and \$84,516,826 of employee funded ASA annuities.

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SUMMARY OF VALUATION RESULTS

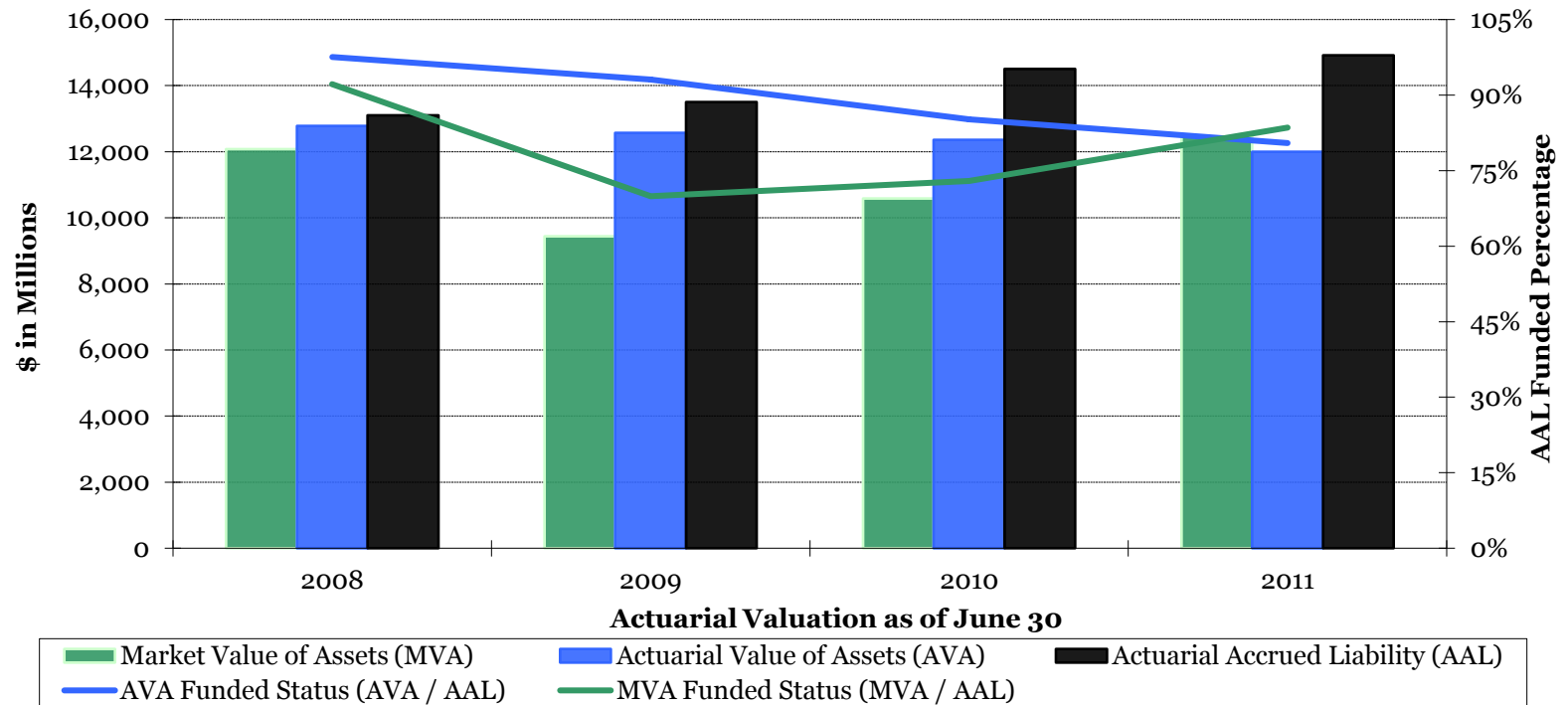
	<u>JRS</u>	<u>C&E Fund</u>	<u>PARF</u>	<u>LEDB Fund</u>
<u>Membership Statistics:</u>				
Active				
Number	363	440	212	7
Average Age	54.3	41.5	48.0	65.3
Average Years of Service	8.3	10.9	9.0	6.6
Covered Payroll of Actives	\$ 45,764,278	\$ 24,028,462	\$ 18,081,976	
Inactive - Vested				
Number	66	5	85	40
Average Age	61.0	48.2	54.9	67.1
Average Years of Service	18.1	20.5	12.3	7.4 ¹
Inactive - Non-Vested				
Number	31	59	177	-
Retiree/Beneficiary/Disabled				
Number	310	176	76	65
Average Age	75.1	68.4	69.1	75.0
Annual Benefits Payable	\$ 16,787,212	\$ 3,978,369	\$ 1,617,923	\$ 355,782
Total Membership	770	680	550	112

¹ Average based on service before November 8, 1989.

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HISTORICAL SUMMARY

Total PERF – 4 Year History of Funded Status ¹



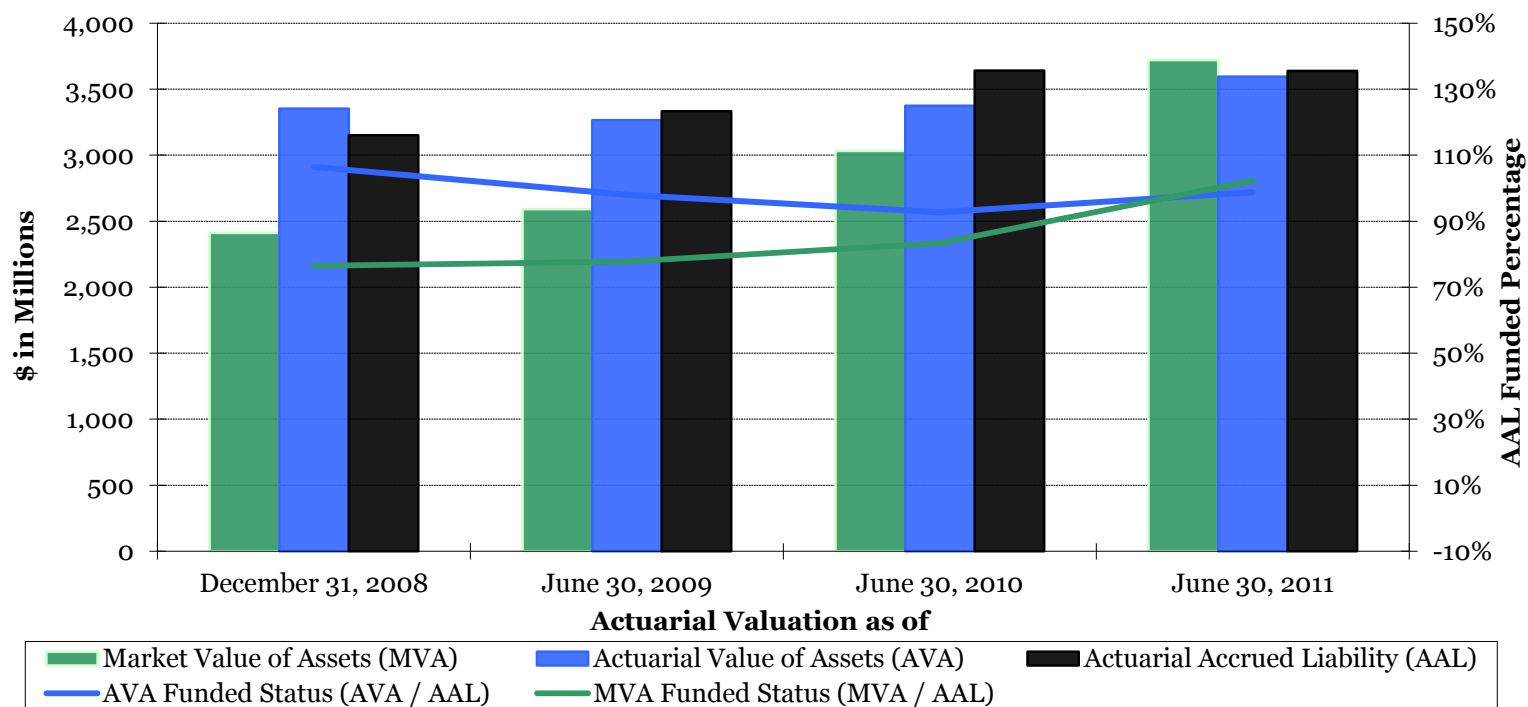
<u>Actuarial Valuation as of June 30:</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
Actuarial Accrued Liability (AAL)	\$13,103.2	\$13,506.3	\$14,506.1	\$14,913.1
Actuarial Value of Assets (AVA)	12,780.1	12,569.3	12,357.2	12,000.6
Market Value of Assets (MVA)	12,073.5	9,442.3	10,581.3	12,461.4
Unfunded Liability (AAL - AVA)	323.1	937.0	2,148.9	2,912.5
AVA Funded Status (AVA / AAL)	97.5%	93.1%	85.2%	80.5%
MVA Funded Status (MVA / AAL)	92.1%	69.9%	72.9%	83.6%

¹ Valuation results prior to June 30, 2010 were calculated by the prior actuary.

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HISTORICAL SUMMARY

1977 Fund – 4 Year History of Funded Status ¹



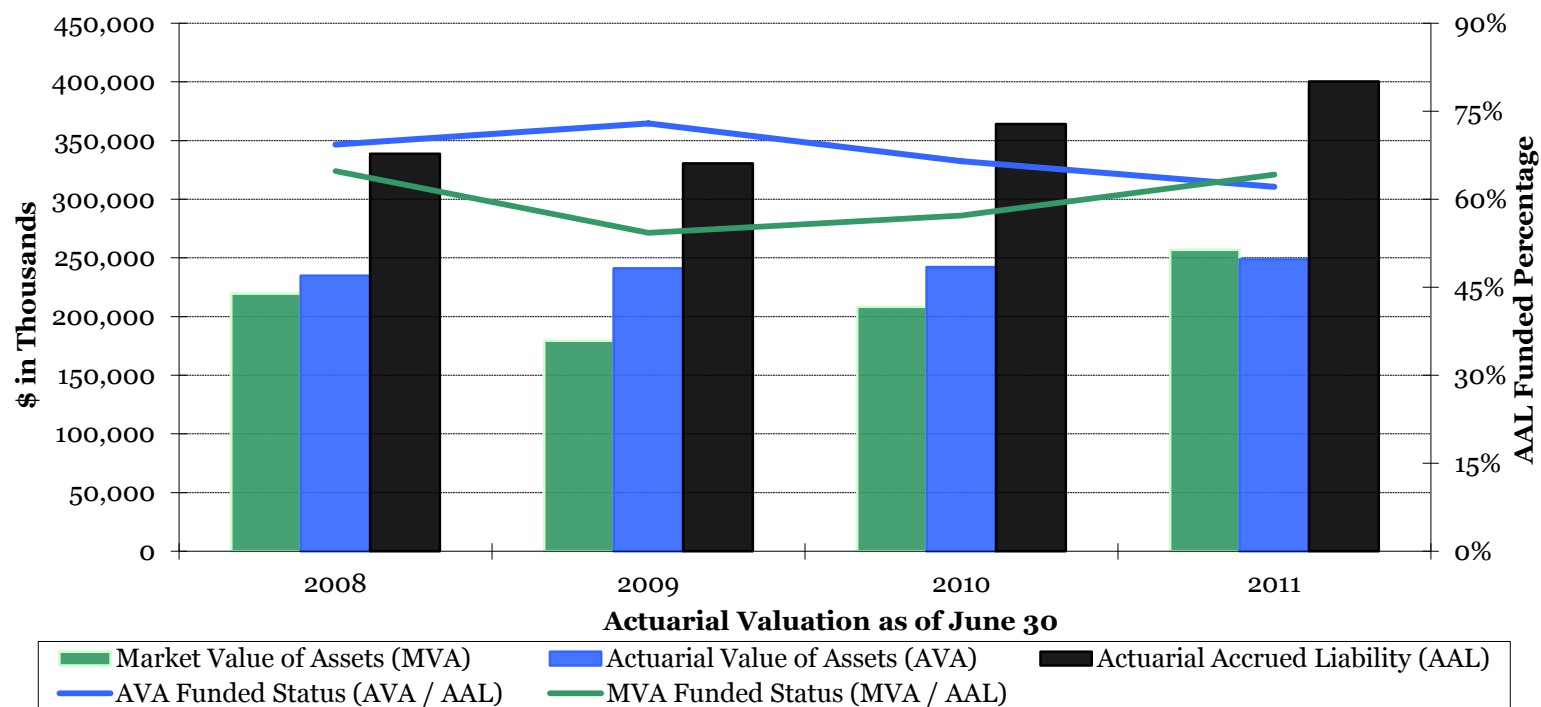
<u>Actuarial Valuation as of:</u>	<u>December 31, 2008</u>	<u>June 30, 2009</u>	<u>June 30, 2010</u>	<u>June 30, 2011</u>
Actuarial Accrued Liability (AAL)	\$3,150.8	\$3,332.7	\$3,639.7	\$3,639.0
Actuarial Value of Assets (AVA)	3,352.7	3,265.6	3,374.4	3,593.8
Market Value of Assets (MVA)	2,410.8	2,591.7	3,033.3	3,721.4
Unfunded Liability (AAL - AVA)	(201.9)	67.1	265.3	45.2
AVA Funded Status (AVA / AAL)	106.4%	98.0%	92.7%	98.8%
MVA Funded Status (MVA / AAL)	76.5%	77.8%	83.3%	102.3%

¹ Valuation results prior to June 30, 2010 were calculated by the prior actuary.

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HISTORICAL SUMMARY

JRS – 4 Year History of Funded Status ¹



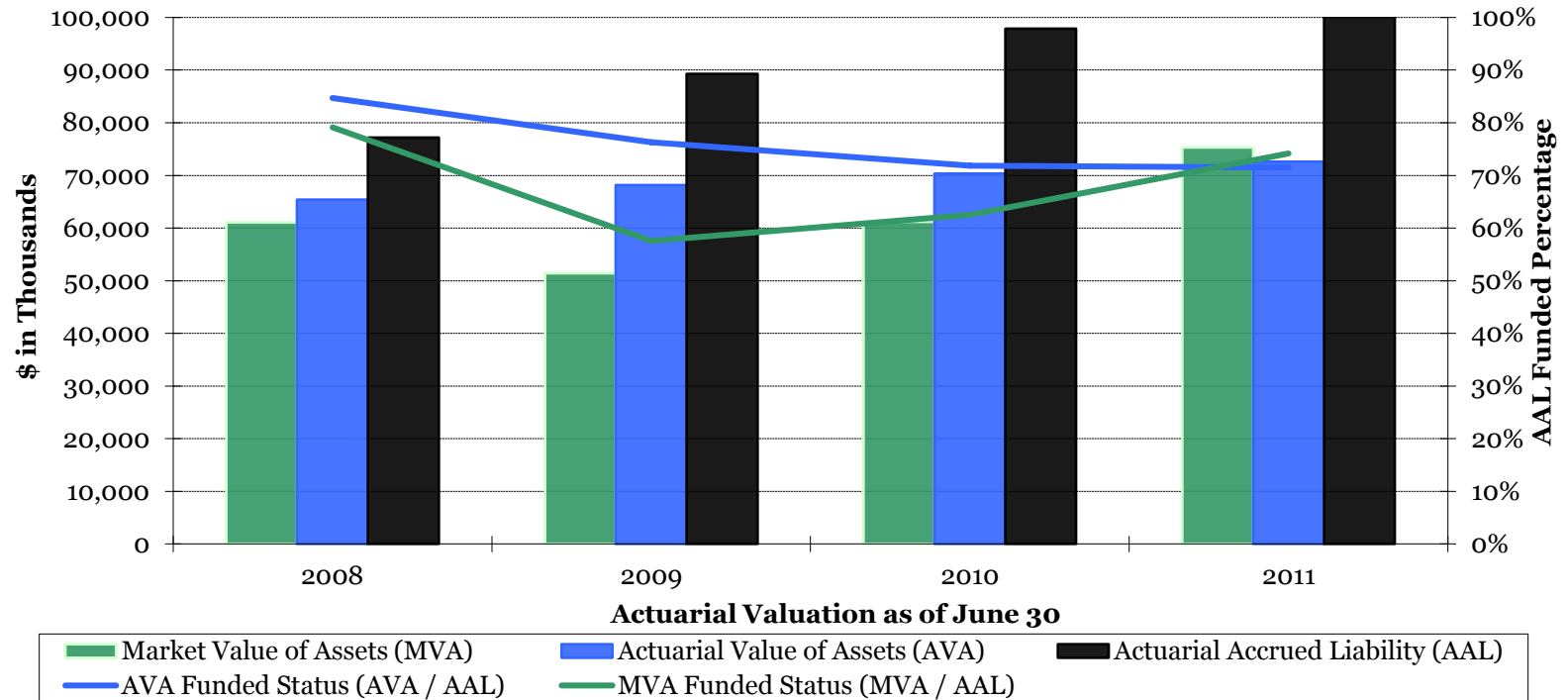
<u>Actuarial Valuation as of June 30:</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
Actuarial Accrued Liability (AAL)	\$338,749.0	\$330,551.2	\$364,122.7	\$400,273.5
Actuarial Value of Assets (AVA)	234,880.5	240,953.9	242,142.8	248,623.3
Market Value of Assets (MVA)	219,425.5	179,428.1	208,395.2	256,985.8
Unfunded Liability (AAL - AVA)	103,868.5	89,597.3	121,979.9	151,650.2
AVA Funded Status (AVA / AAL)	69.3%	72.9%	66.5%	62.1%
MVA Funded Status (MVA / AAL)	64.8%	54.3%	57.2%	64.2%

¹ Valuation results prior to June 30, 2010 were calculated by the prior actuary.

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HISTORICAL SUMMARY

C&E Fund – 4 Year History of Funded Status ¹



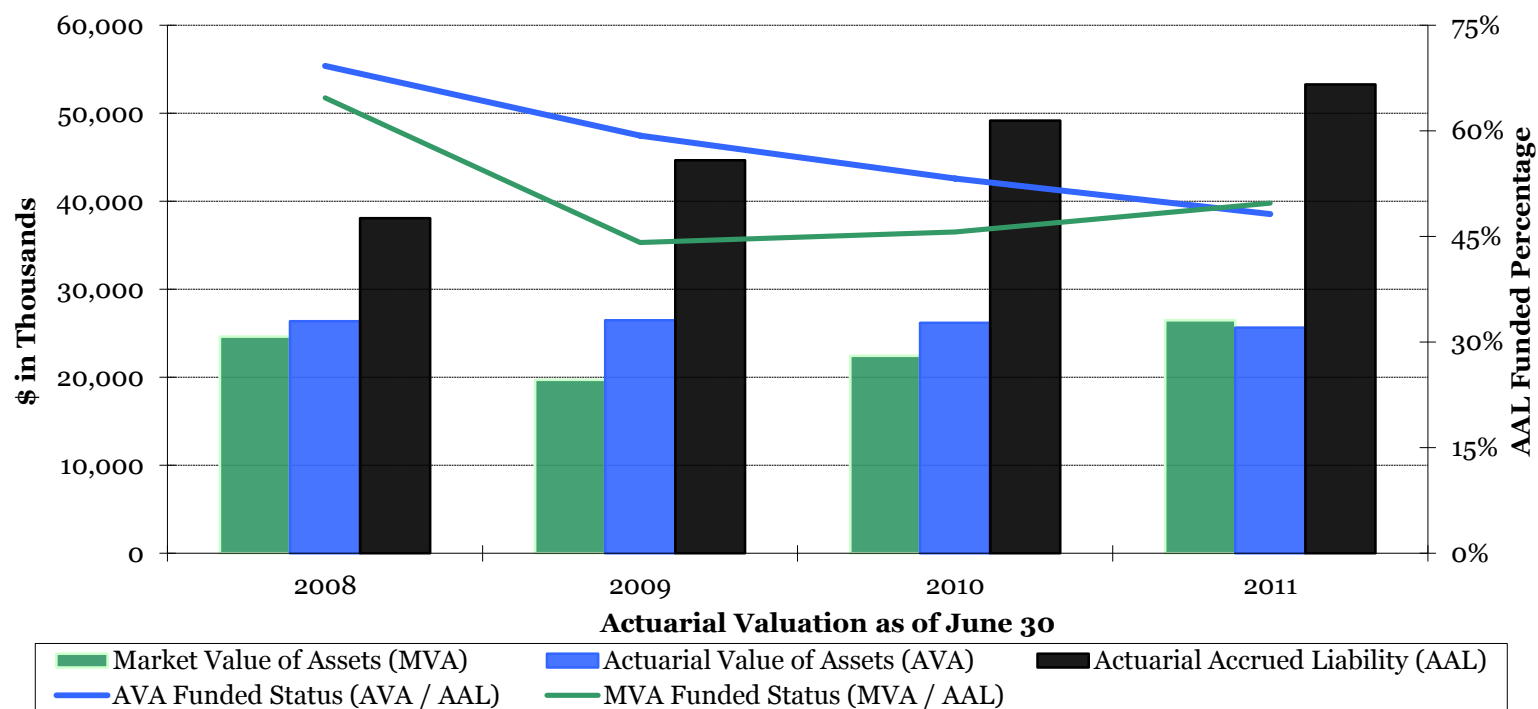
<u>Actuarial Valuation as of June 30:</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
Actuarial Accrued Liability (AAL)	\$77,176.7	\$89,295.6	\$97,861.6	\$101,533.8
Actuarial Value of Assets (AVA)	65,375.1	68,169.9	70,326.8	72,599.4
Market Value of Assets (MVA)	61,075.5	51,404.2	61,174.5	75,305.7
Unfunded Liability (AAL - AVA)	11,801.5	21,125.7	27,534.8	28,934.4
AVA Funded Status (AVA / AAL)	84.7%	76.3%	71.9%	71.5%
MVA Funded Status (MVA / AAL)	79.1%	57.6%	62.5%	74.2%

¹ Valuation results prior to June 30, 2010 were calculated by the prior actuary.

EXECUTIVE SUMMARY

HISTORICAL SUMMARY

PARF – 4 Year History of Funded Status ¹



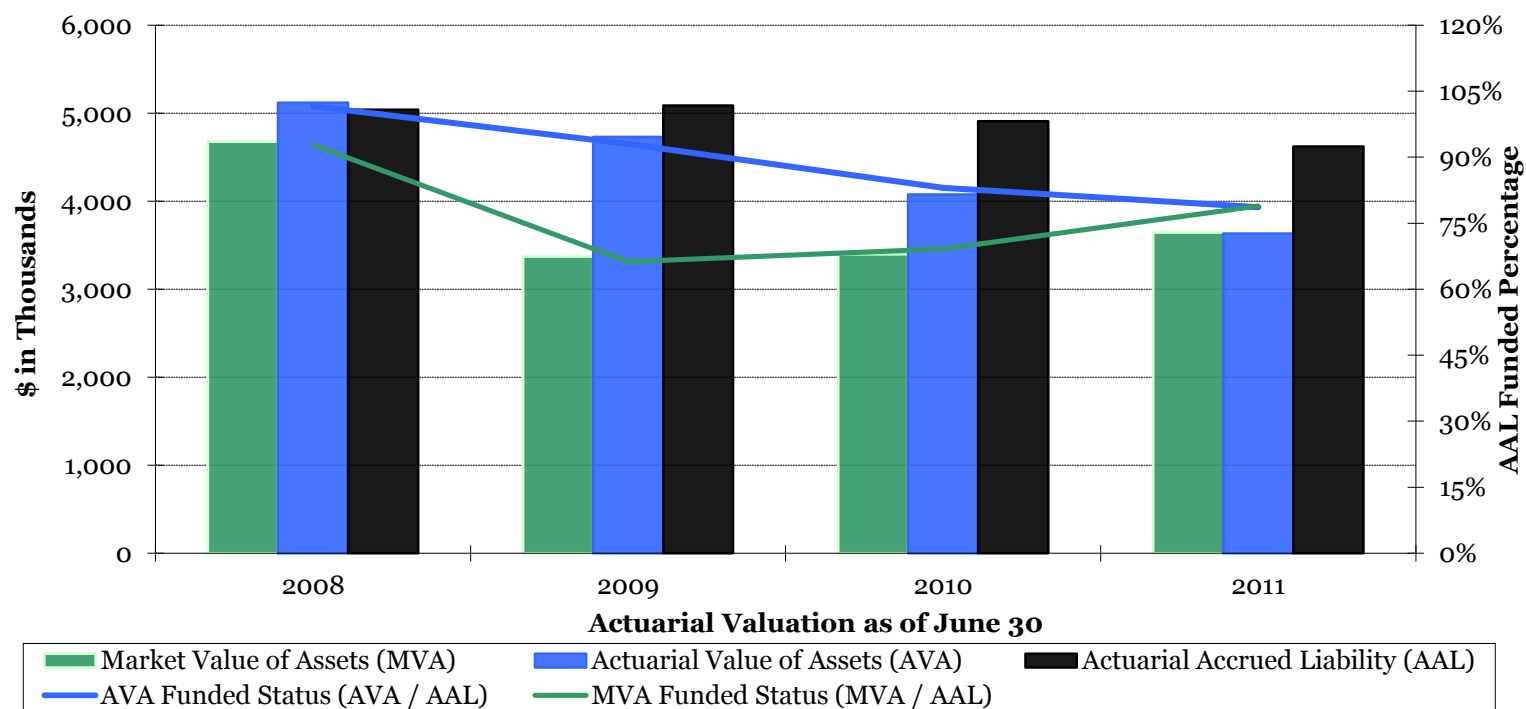
<u>Actuarial Valuation as of June 30:</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
Actuarial Accrued Liability (AAL)	\$38,069.0	\$44,632.2	\$49,173.7	\$53,252.4
Actuarial Value of Assets (AVA)	26,350.5	26,466.7	26,166.3	25,651.5
Market Value of Assets (MVA)	24,613.0	19,695.8	22,431.0	26,477.7
Unfunded Liability (AAL - AVA)	11,718.5	18,165.5	23,007.4	27,600.9
AVA Funded Status (AVA / AAL)	69.2%	59.3%	53.2%	48.2%
MVA Funded Status (MVA / AAL)	64.7%	44.1%	45.6%	49.7%

¹ Valuation results prior to June 30, 2010 were calculated by the prior actuary.

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HISTORICAL SUMMARY

LEDB Fund – 4 Year History of Funded Status ¹



<u>Actuarial Valuation as of June 30:</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
Actuarial Accrued Liability (AAL)	5,039.1	5,087.4	4,908.6	4,620.8
Actuarial Value of Assets (AVA)	5,120.0	4,730.4	4,074.6	3,633.7
Market Value of Assets (MVA)	4,674.5	3,369.0	3,395.5	3,644.8
Unfunded Liability (AAL - AVA)	(80.9)	357.0	834.0	987.1
AVA Funded Status (AVA / AAL)	101.6%	93.0%	83.0%	78.6%
MVA Funded Status (MVA / AAL)	92.8%	66.2%	69.2%	78.9%

¹ Valuation results prior to June 30, 2010 were calculated by the prior actuary.